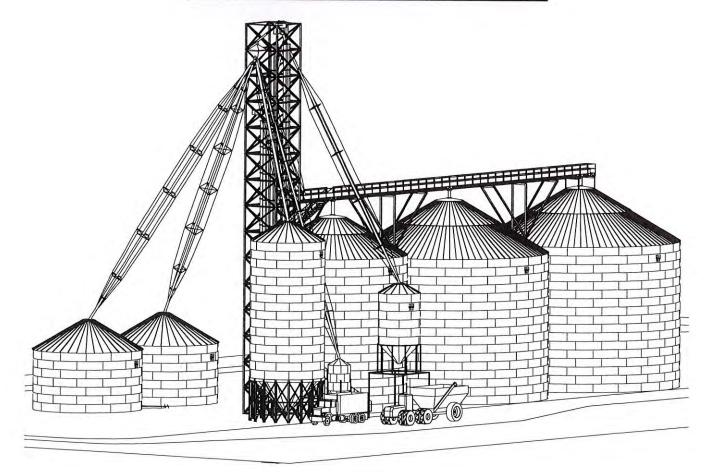


# BEHLEN

# GRAIN BIN OPERATION MANUAL





#### 4.15. Hopper Bottom Bins

4.15.1. IMPORTANT: Hopper bins are not intended for drying. Grain should be dry and cool when put in a hopper bin for storage. Maximum allowable storage time for wet grain (over 16%) in a hopper bin may be only one to two days. Storing high-moisture or spoiled grains may deteriorate the galvanized coating of the bin. High-moisture grain may also cause grain to crust. Probe the stored grain regularly to check its quality. Store only free-flowing material. Do not store hard-to-flow material such as soybean meal or other materials that will cake or crust. Unloading spoiled grain at a high rate of speed, that is bridged or vertically crusted, may cause uneven pressures resulting in hopper tank failure. Check the inside of the bin while unloading to ensure no vertical crusting is evident.

4.15.2. Before filling the hopper-bottom bin, be certain no objects or old grain remain inside. Thoroughly clean

the hopper bottom after each use and be certain the bottom unload gate is completely closed. Keep all persons out of bin except when absolutely necessary. Refer to the safety section for general guidelines on entering bins, ventilation, and using safety harnesses.

4.15.3. Loading must be done through the peak ring. Off-center filling may cause excessive loads, which may result in the bin leaning and/or sidewall stiffener buckling. Unloading must be done through the outlet of the cone only. Note: Never cut holes in the bin sidewall. Off-center unloading will result in excessive down pressure and uneven load distribution that may cause sidewall buckling. Also, if the hopper-bottom bin is sealed tight at the eave, the peak ring cap and manhole must be opened when unloading grain. Lack of proper roof openings for rapid unloading can cause the roof to be pulled down.

### LOADING HOPPER

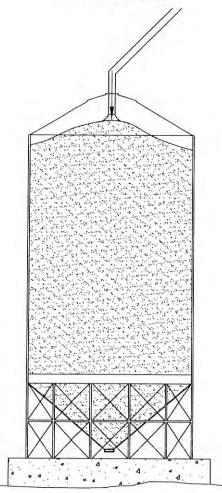
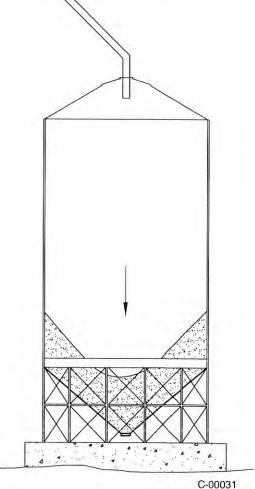


Figure 30. Hopper bins.

## UNLOADING HOPPER



C-00031 Hopper Bin